

TCTAP A-072**Availability of Modified Dialysis for Dialysis Patient After Using Contrast Dye in Cardiac Catheterization**Kenta Murakami,¹ Ryosuke Kametani,¹ Akimitsu Tanaka¹¹Nagoya Tokushukai General Hospital, Japan

BACKGROUND In hemodialyzed patient, we can often see the complication (ex. Hypotension, bad feeling) in hemodialysis (HD) after cardiac catheterization. So we made modification for HD after the first time cardiac catheterization. Content of the modify HD are that the blood osmolality was changed slowly.

METHODS The candidate was our consecutive HD patients (218 patients, 157 male, 67.1 ± 9.8 y.o.) who performed cardiac catheterization from February 2009 to August 2014. From February 2009 to December 2012 we performed usual HD after cardiac catheterization (HD group: 157 patients). From January 2013 to August 2014 we performed modified HD after that (mHD group: 61 patients). Content of modify were that we decreased dialysis flow rate (300 ml/min) in anterior half of HD; in posterior half we performed ordinary HD. The definition of the complication are discontinuity of HD from hypotension or/and bad feeling, Unattainable of defecated water and requisition of infusion solution.

RESULTS Developed the complication of HD group was 59 patients (37.6 %), mHD group was 7 patients (11.3 %). It was significant difference between the groups (p=0.00013).

	mHD group N=62(Feb. 2012– Aug. 2014)	HD group N=157(Feb. 2009–Dec. 2012)	P
Age	66.6 ± 9.3	67.8 ± 10.5	0.19
Sex	M/F: 46/15	M/F: 111/46	0.61
History of HD (year)	11.6 ± 29.3	8.6 ± 6.7	0.27
Body weight	56.3 ± 11.5	54.1 ± 11.7	0.18
History of DM	48.4	73.9	0.003
LVEF	57.7 ± 12.9	56.1 ± 14.5	0.49
Amount of contrast dye	98.7 ± 55.1	171.3 ± 90.0	<0.0001
Cath. Time	58.6 ± 46.6	84.1 ± 65.1	<0.0045
CPK	81.5 ± 51.9	176.2 ± 221.1	0.11
Rate of Performed HD the next day, not on the day	48	446	<0.0001
Complication rate	7(11.3%)	59(37.6%)	0.00013

CONCLUSION Our Modifying, the blood osmolality was changed slowly, of HD after the first time cardiac catheterization was useful for reducing the rate complication.

HYPERTROPHIC OBSTRUCTIVE CARDIOMYOPATHY (TCTAP A-073)**TCTAP A-073****Alcohol Septal Ablation in Hypertrophic Cardiomyopathy: A Prospective Study**Praskas Chandra Mandal,¹ Debabrata Bera¹¹Apollo Gleneagles Hospital, India

BACKGROUND Hypertrophic cardiomyopathy (HCM) is the most common genetic cardiovascular disease caused by multiple mutations of cardiac sarcomeres. Resting and provokable left ventricular outflow tract (LVOT) gradient is a strong determinant of morbidity and mortality in patients with hypertrophic cardiomyopathy. Hemodynamic and electrical complications are more common in patients with LVOT obstruction in compared to patients of HCM without LVOT obstruction. Relief of LVOT obstruction improves both symptoms and long term survival. Surgical myectomy is now the preferred method of relieving LVOT obstruction. Alcohol septal ablation in HCM is generally reserved for symptomatic patients who are not suitable candidates for surgical myectomy. In practical scenario another large proportion of patients refuse for surgical mode of therapy. We conducted a prospective study in a tertiary care hospital in Eastern India over last 10 years including these two groups of patients with a goal to study immediate and long term results of alcohol septal ablation.

METHODS We enrolled 51 patients of obstructive HCM (peak LVOT gradient ≥50 mm of Hg) over 5 years (Nov 2004 to Oct 2009) who were persistently symptomatic on medical management. Ten patients were not suitable candidates for surgery. Among the rest of

the subjects, 26 patients refused surgical treatment. We included only the obstructive variety (HOCM) of patients who were class III to class IV symptomatic despite optimal medical management with beta-blocker, calcium-channel blocker and disopyramide. Patients with isolated mid-cavity obstruction were excluded from the study. Alcohol septal ablation was performed on 36 patients who were not suitable candidates for surgery or not willing to undergo surgery. The procedure could not be completed in one patient due to hemodynamically unstable incessant ventricular tachycardia. Subsequently 35 patients were followed up for next 5 years both clinically and with echocardiography.

RESULTS The mean age at intervention was 32±10 years. The peak dynamic LVOT gradient pre-operatively was 73±20 mm Hg. Alcohol septal ablation was performed successfully in all 35 patients with immediate LVOT gradient reduction. The peak LVOT gradient post-operatively was 13±7 mm of Hg. Three patients developed complete heart block during the procedure, among which 2 patients reverted back spontaneously to sinus rhythm within 72 hours. One patient did not revert back and permanent pacemaker was implanted. Over next 5-8 years follow up 4 patients died (2 patients with refractory heart failure, 2 patients with sudden cardiac death). Three patients developed atrial fibrillation over follow up. Rest of the patients is doing well symptomatically and echocardiography showed no recurrence of significant LVOT obstruction.

CONCLUSION HCM is a complex genetic disorder with several long term complications especially in the obstructive variety. Though it is said to reserve alcohol septal ablation (Class IIa) only for those who are not suitable candidates for surgical myectomy, a large group of symptomatic patients who refuse for surgical option can also be treated successfully with alcohol septal ablation. The immediate and long-term outcome is good.

INNOVATIVE DEVICES AND FUTURISTIC THERAPIES (TCTAP A-074 TO TCTAP A-075)**TCTAP A-074****Development of a Fenestrated Window Shape Aortic Arch Stent Graft with a Preloaded Catheter for Protecting Branch Arteries: An Experimental Study in Swine**Han Cheol Lee,¹ In Sub Han,¹ Hye Won Lee,¹ Jun-Hyok Oh,¹Kwang Soo Cha,¹ Taeg Jong Hong¹¹Pusan National University Hospital, Korea (Republic of)

BACKGROUND Thoracic endovascular aortic repair (TEVAR) shows limitations in cases where the aortic pathology involves the aortic arch and only a short proximal landing zone is thereby available for the stent graft. In our previous study, we developed a round shape fenestrated aortic arch stent graft (FASG) with a preloaded catheter for protecting branch arteries. But, FASG with round shape fenestration is not available in case of emergency as aortic rupture, complicated aortic dissection because FASG with round shape fenestration is manufactured individually. In this study, we developed a window shape FASG with a preloaded catheter for protecting branch arteries and performed a preclinical study with this device in swine.

METHODS The FASG is a self-expandable nitinol-PTEF stent graft with window shape fenestration and preloading catheter that is designed to access right carotid artery safely. We design a window shaped fenestration and preloading catheter placed inside the stent graft to save blood flow to the carotid, left subclavian arteries. After window shape FASG is partially deployed, 0.35 inch guidewire is placed into the right carotid artery and then stent graft is fully deployed. Following separate stent graft for right carotid artery is deployed. The sizes of fenestrated window were 30mm in width, 15mm in length and 40mm in width, 15mm in length.

Six FASGs with window shaped fenestration and a side branch stent graft were advanced through the iliac artery in 6 swines weighing 70-80 kg. The presence of endoleaks and the patency and deformity of the grafts were examined with digital subtraction angiography (DSA) at 4 weeks postoperatively. A postmortem examination was performed at 8 weeks to evaluate the gross morphology, patency, and deformity of the FASGs with window shaped fenestration.